RCVD JAN 5 '07
OIL CONS. DIV.
DIST. 3

Form 3160-3
(August 1999)

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANGEMENT
APPLICATION OFOR PERMIT TO DRILL OR REENETER

2006 NOV 28 PM 2 14

RECEIVED
070 FARMINGTON NM

FORM APPROVED
OMB No. 1004-0136
Expires November 30, 2000

5. Lease Serial No. **NM-03566**

6. If Indian, Allottee or tribe Name

1a. Type of Work: ■ DRILL ☐ REENTER

7. If Unit or CA Agreement, Name and No

1b. Type of Well: ☐ Oil Well ■ Gas Well Gas ☐ Other ☐ Single Zone ☐ Multiple Zone

8. Lease Name and Well No.
Stewart LS 8M

2. Name of Operator
BP AMERICA PRODUCTION COMPANY

9. API Well No.
30-045-34084

3a. Address
P.O. BOX 3092 HOUSTON, TX 77079-2064

3b. Phone No. *(include area code)*
281-366-3866

10. Field and Pool, or Exploratory
Basin Dakota & Blanco Mesaverde

4. Location of Well ***(Report location clearly and in accordance with any State requirements.*)***

At surface **965' FNL & 1020' FWL** NW/NW

At proposed prod. Zone **SAME** Lot 4

11. Sec., T., R., M., or Blk, and survey or Area
SECTION 28 T30N & R10W
D

14. Distance in miles and direction from nearest town or post office*
6.6 MILES SOUTHEAST FROM AZTEC, NM

12. County or Parish
SAN JUAN

13. State
NEW MEXICO

15. Distance from proposed* Location to nearest Property or lease line, ft. (Also to nearest rig. Unit line, if any) 965'

16. No. of Acres in lease
326.64

17. Spacing Unit dedicated to this well
326.64 W2

18. Distance from proposed location* to nearest well, drilling, completed, applied for, on this lease, ft.

19. Proposed Depth
7510' MD

20. BLM/BIA Bond No. on file
WY2924

21. Elevations (show whether DF, KDB., RT, GL, etc.
6366' GL

22. Approximate date work will start*
01/10/07

23. Estimated duration
7 DAYS

24. Attachments

The following, completed in accordance with the requirements of Onshore Oil and Gas Order No. 1, shall be attached to this form:

1. Well plat certified by a registered surveyor.
2. A Drilling Plan.
3. A Surface Use Plan (if the location is on National forest System Lands, the SUPO shall be filed with the appropriate Forest Service Office).
4. Bond to cover the operations unless covered by an existing bond on file (see Item 20 above).
5. Operator certification.
6. Such other site specific information and/or plans as may be required by the authorized officer.

25. Signature Kristina Hurts | Name *(Printed/typed)* **Kristina Hurts** | Date **11/27/2006**

Title
Regulatory Analyst

Approved by *(Signature)* | Name *(Printed/Typed)* | Date 1/3/07

Title Acting AFM | Office

Application approval does not warrant or certify the applicant holds legal or equitable title to those rights in the subject lease which would entitle the applicant to conduct Operations thereon.

Conditions of approval, if any, are attached.

Title 18 U.S.C. Section 1001 and title 43 U.S.C. Section 1212, make it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

(Instructions on reverse)

NMOCD
1/8/07

Distr. I
PO Box 1980, Hobbs NM 88241-1980
District II
PO Drawer KK, Artesia, NM 87211-0719
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
PO Box 2088, Santa Fe, NM 87504-2088

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
PO Box 2088
Santa Fe, NM 87504-2088

Form C-102
Revised February 21, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

2006 NOV 28 PM 2 14
RECEIVED
070 FARMINGTON NM

☐ AMENDED REPORT

RCVD JAN5'07
OIL CONS. DIV.
DIST. 3

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number	2 Pool Code	3 Pool Name
30-045-34084	71599/72319	Basin Dakota & Blanco Mesaverde

4 Property Code	5 Property Name	6 Well Number
001129	Stewart LS	# 8M

7 OGRID No.	8 Operator Name	9 Elevation
778	BP AMERICA PRODUCTION COMPANY	6366

10 Surface Location

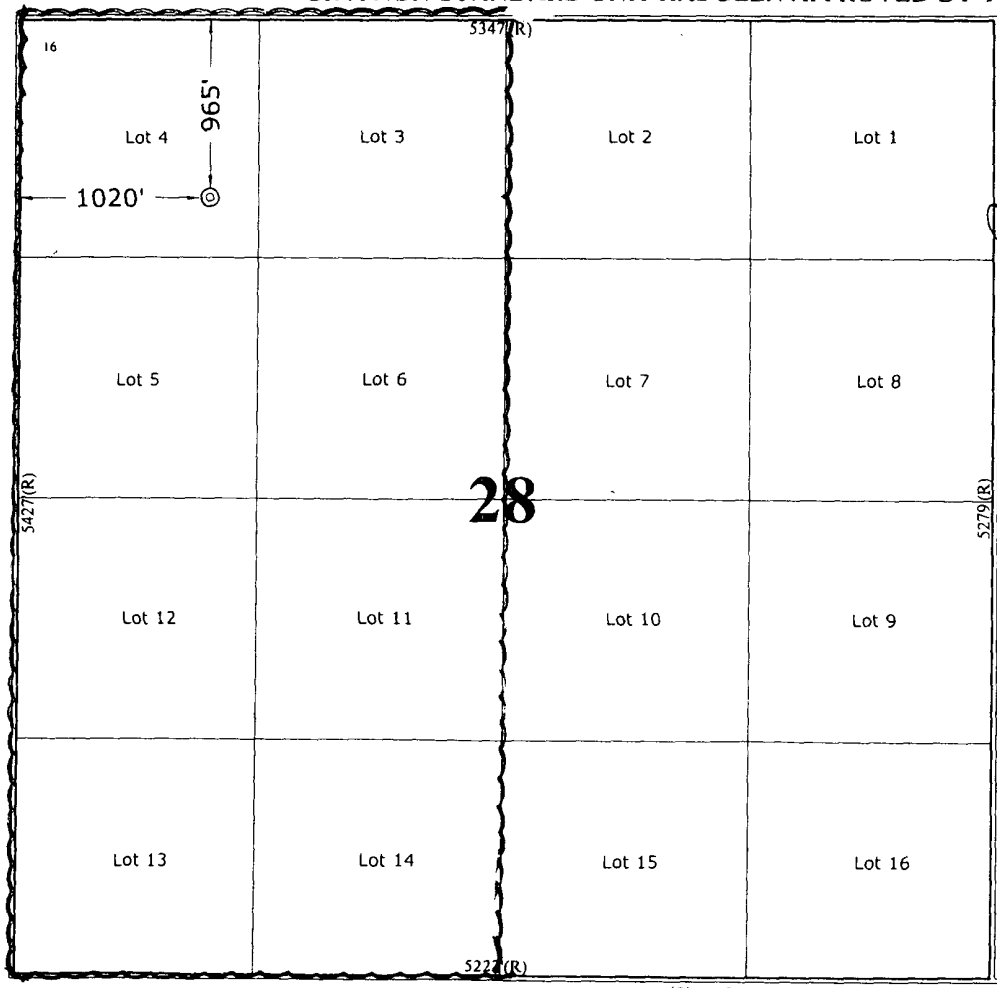
UL or Lot No.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
Lot 4 (D)	28	30 N	10 W		965	NORTH	1020	WEST	SAN JUAN

11 Bottom Hole Location If Different From Surface

7 UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County

12 Dedicated Acres	13 Joint or Infill	14 Consolidation Code	15 Order No.
326.64			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION



(R) - BLM Record

17 OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

Printed Name: KRISTINA HURTS

Title: Regulatory Analyst

Date: 11/27/06

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.

Restaked: November 6, 2006
June 20, 2006

Date of Survey

Signature and Seal of Professional Surveyor

GARY L. JONES
NEW MEXICO
7016
REGISTERED PROFESSIONAL LAND SURVEYOR

7016

Certificate Number

Submit 3 Copies To Appropriate District Office
District I
1625 N. French Dr., Hobbs, NM 88240
District II
1301 W. Grand Ave., Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources

OIL CONSERVATION DIVISION
1220 South St. Francis Dr.
Santa Fe, NM 87505

Form C-103
May 27, 2004

WELL API NO. 30-045-34084
~~New Well~~

5. Indicate Type of Lease STATE ☐ FEE ☐

6. State Oil & Gas Lease No.

SUNDRY NOTICES AND REPORTS ON WELLS
(DO NOT USE THIS FORM FOR PROPOSALS TO DRILL OR TO DEEPEN OR PLUG BACK TO A DIFFERENT RESERVOIR. USE "APPLICATION FOR PERMIT" (FORM C-101) FOR SUCH PROPOSALS.)

7. Lease Name or Unit Agreement Name
Stewart LS

1. Type of Well: Oil Well ☐ Gas Well ☒ Other ☐

8. Well Number
8M

2. Name of Operator
BP AMERICA PRODUCTION COMPANY

9. OGRID Number
000778

3. Address of Operator
P.O. BOX 3092 HOUSTON, TX 77079-2064

10. Pool name or Wildcat
Basin Dakota & Blanco Mesaverde

4. Well Location
Unit Letter **D** : **965** feet from the **NORTH** line and **1020** feet from the **West** line
Section **28** Township **30N** Range **10W** NMPM **SAN JUAN** County

11. Elevation *(Show whether DR, RKB, RT, GR, etc.)*
6366'

Pit or Below-grade Tank Application ☒ or Closure ☐

>200

Pit type DRILLING Depth to Groundwater >100' Distance from nearest fresh water well > 1000' Distance from nearest surface water < 1000'

Pit Liner Thickness: 12 mil Below-Grade Tank: Volume _____ bbls; Construction Material _____

12. Check Appropriate Box to Indicate Nature of Notice, Report or Other Data

NOTICE OF INTENTION TO:				SUBSEQUENT REPORT OF:			
PERFORM REMEDIAL WORK	☐	PLUG AND ABANDON	☐	REMEDIAL WORK	☐	ALTERING CASING	☐
TEMPORARILY ABANDON	☐	CHANGE PLANS	☐	COMMENCE DRILLING OPNS.	☐	P AND A	☐
PULL OR ALTER CASING	☐	MULTIPLE COMPL	☐	CASING/CEMENT JOB	☐		
OTHER: **LINED DRILLING PIT**	☒			OTHER:	☐		

13. Describe proposed or completed operations. (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work). SEE RULE 1103. For Multiple Completions: Attach wellbore diagram of proposed completion or recompletion.

Construct a lined drilling pit per BP America – San Juan Basin Drilling/ Workover Pit Construction Plan issued date of 11/17/2004. Pit will be closed according to closure plan on file.

I hereby certify that the information above is true and complete to the best of my knowledge and belief. **I further certify that any pit or below-grade tank has been/will be constructed or closed according to NMOCD guidelines ☒, a general permit ☐ or an (attached) alternative OCD-approved plan ☐.**

SIGNATURE Kristina Hurts TITLE Regulatory Analyst DATE 11/27/06

Type or print name Kristina Hurts E-mail address: hurtk0@bp.com Telephone No. 281-366-3866

For State Use Only

APPROVED BY: _____ TITLE DEPUTY OIL & GAS INSPECTOR, DIST. ☒ DATE JAN 08 2007

Conditions of Approval (if any):

PAD LAYOUT PLAN & PROFILE

BP AMERICA PRODUCTION COMPANY

Stewart LS # 8M

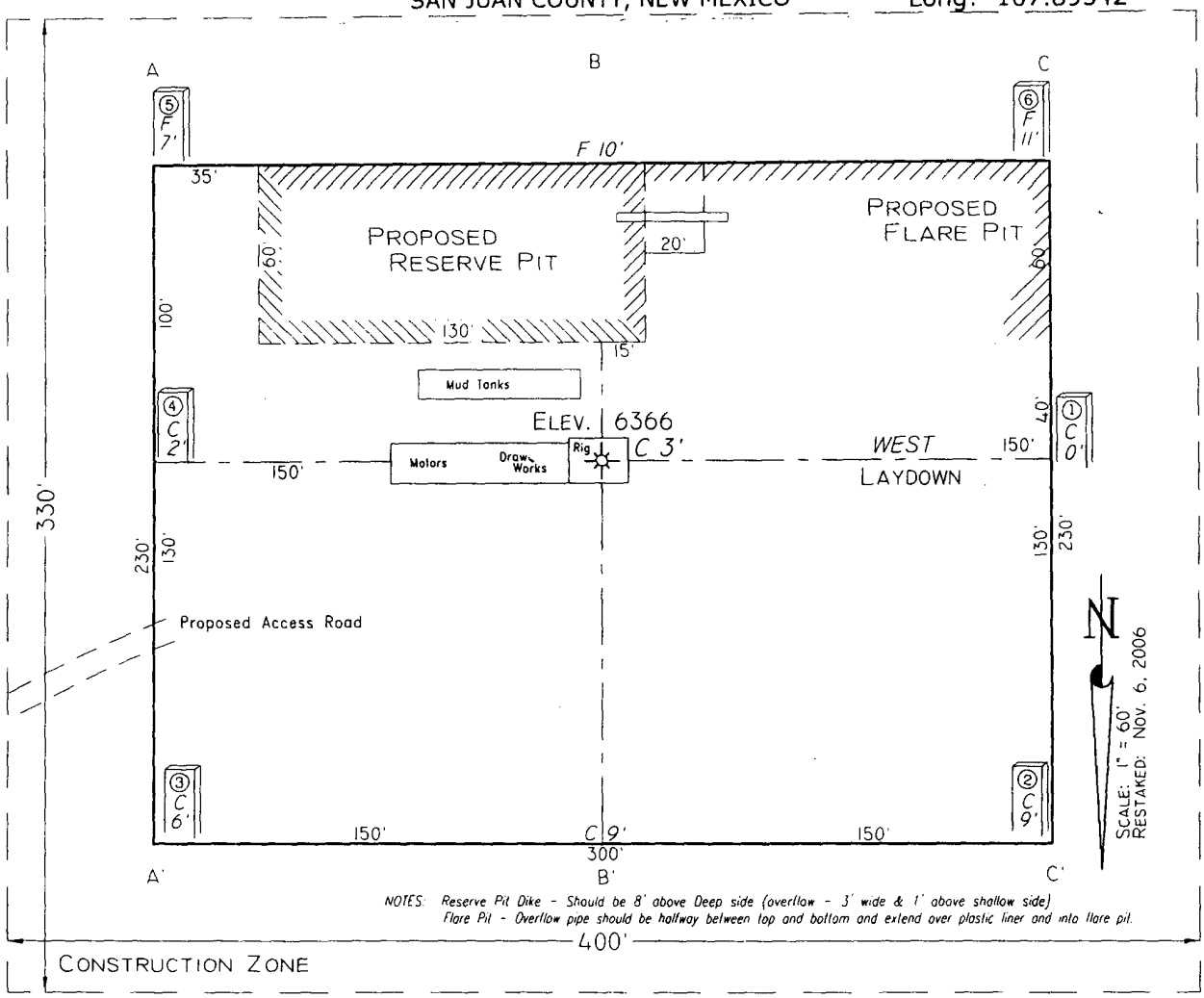
965' F/NL 1020' F/WL

SEC. 28, T30N, R10W, N.M.P.M.

SAN JUAN COUNTY, NEW MEXICO

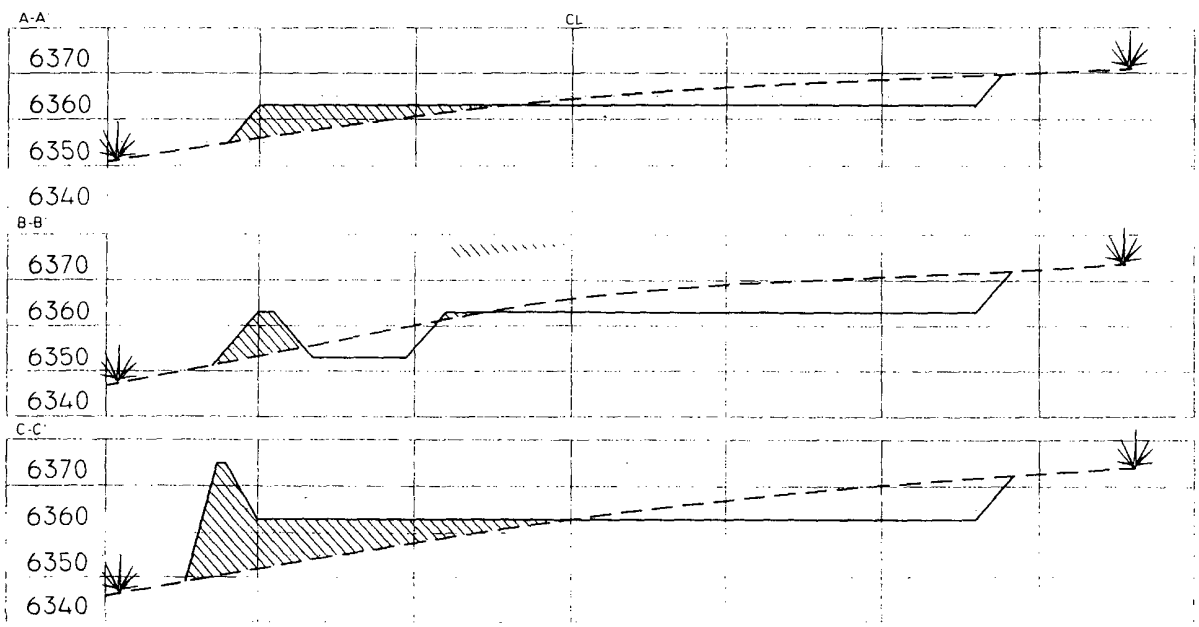
Lat: 36.78821° (83)

Long: 107.89542°



Area of Construction Zone - 330'x400' or 3.03 acres, more or less.

SCALE: 1"=60' -HORIZ.
1"=40' -VERT.



NOTE: Contractor should call One-Call for location of any marked or unmarked buried pipelines or cables on well pad and/or access road at least two (2) working days prior to construction.

Cuts and fills shown are approximate - final finished elevation is to be adjusted so earthwork will balance. Corner stakes are approximate and do not include additional areas needed for sideslopes and drainages. Final Pad Dimensions are to be verified by Contractor

VANN SURVEYS
P. O. Box 1306
Farmington, NM

BP AMERICA PRODUCTION COMPANY

DRILLING AND COMPLETION PROGRAM

7/17/2006 Modified 11/15/2006

Lease:	Stewart LS	**Well Name & No.**	Stewart LS #8M	**Field:**	Blanco Mesaverde/Basin Dakota
County:	San Juan, New Mexico	**Surface Location:**	28-30N-10W: 965' FNL, 1020' FWL		
Minerals:	State	**Surface:**	Lat: 36.7881790 deg; Long: -107.8950279 deg		
Rig :	Aztec 184	**BH Location:**	same		
OBJECTIVE:	Drill 250' below the top of the Two Wells Mbr, set 4-1/2" production liner, Stimulate DK, MF, and PL intervals.				

METHOD OF DRILLING	
TYPE OF TOOLS	DEPTH OF DRILLING
Rotary	0 - TD

LOG PROGRAM	
Type	**Depth Interval**
Single Run	
Cased Hole	
RST- CBL	TD to 7" shoe
	Identify 4 ½" cement top

REMARKS:

The recommended TD is intended to penetrate the ENCN (~30') in order to evaluate, and possibly produce it. Offsetting wells encountered no water flow at this depth. See attached cross-section.

The intermediate casing should be set 100 ft. into the MENF to minimize the risks encountered drilling through the possibly water productive CLFH.

APPROXIMATE DEPTHS OF GEOLOGICAL MARKER

Actual GL: 6371 Estimated KB: 6,385.0'

Marker		SUBSEA	TVD	APPROX. MD
Ojo Alamo		4,860'	1,525'	1,525'
Kirtland		4,697'	1,688'	1,688'
Fruitland	*	4,111'	2,274'	2,274'
Fruitland Coal	*	3,833'	2,552'	2,552'
Pictured Cliffs	*	3,488'	2,897'	2,897'
Lewis	*	3,343'	3,042'	3,042'
Cliff House	#	1,994'	4,391'	4,391'
Menefee	#	1,705'	4,680'	4,680'
Point Lookout	#	1,189'	5,196'	5,196'
Mancos		833'	5,552'	5,552'
Greenhorn		-763'	7,148'	7,148'
Graneros (bent,mkr)		-819'	7,204'	7,204'
Two Wells	#	-875'	7,260'	7,260'
Paguate	#	-957'	7,342'	7,342'
Cubero	#	-1,009'	7,394'	7,394'
L. Cubero	#	-1,044'	7,429'	7,429'
Encinal Cyn	#	-1,095'	7,480'	7,480'
TOTAL DEPTH:		-1,125'	7,510'	7,510'

Probable completion interval * Possible Pay

SPECIAL TESTS
TYPE
None
REMARKS:

DRILL CUTTING SAMPLES			**DRILLING TIME**	
FREQUENCY	DEPTH		FREQUENCY	DEPTH
30'/10' intervals	4,780'	to TD	Geolograph	0 - TD

MUD PROGRAM:

Interval	TypeMud	#/gal	Vis, sec/qt	/30 min	Other Specification
200'	Spud	8.8 - 9.0	Sufficient to clean hole.		
4,780'	Water/LSND	8.4 - 9.0		<9	Sweep hole while whilst water drilling, LCM onsite
7,510'	Air	1	1000 cfm for hammer		Volume sufficient to maintain a stable and clean wellbore

CASING PROGRAM:

CasingString	Depth	Size	Casing Size	Grade, Thread	Weight	Landing Point	Cement
Surface/Conductor	200'	13 1/2"	9-5/8"	H-40 ST&C	32#		cmt to surface
Intermediate	0' - 4000'	8-3/4"	7"	J/K-55 ST&C	20#		
Intermediate	4000' - 4780'	8 3/4"	7"	N-80 ST&C	23#	100' below MENF	cmt to surface
Production	7,510'	6-1/4"	4-1/2"	J-55	11.6#	DKOT	150' inside Intermediate - TOC survey required

CORING PROGRAM:

None

COMPLETION PROGRAM:

Rigless, 2-3 Stage Limited Entry Hydraulic Frac, FMC Unihead

GENERAL REMARKS:

Notify BLM/NMOCD 24 hours prior to Spud, BOP testing, and Casing and Cementing.

BOP Pressure Testing Requirements

Formation	Depth	Anticipated bottom hole pressure	Max anticipated surface pressure**
Cliffhouse	4,391'	500	0
Point Lookout	5,196'	600	0
Dakota	7,260'	2600	1002.8

Requested BOP Pressure Test Exception = 1500 psi ** Note: Determined using the following formula: ABHP – (.22*TVD) = ASP

Form 46 Reviewed by:	Logging program reviewed by:			
PREPARED BY:	**APPROVED:**	**DATE:**	**APPROVED:**	**DATE:**
HGJ JMP/		17/2006 Modified 11/15/20(		
Form 46 7-84bw	For Drilling Dept.		For Production Dept.	

Cementing Program

Well Name:	Stewart LS #8M		
Location:	28-30N-10W: 965' FNL, 1020' FWL		
County:	San Juan	Well Flac	
State:	New Mexico	Formation:	Blanco Mesaverde/Basin Dakota
		KB Elev (est)	6385
		GL Elev. (est)	6371

Casing Program:

Casing String	Est. Depth (ft.)	Hole Size (in.)	Casing Size (in.)	Thread	TOC (ft.)
Surface	200	13.5	9.625	ST&C	Surface
Intermediate	4780	8.75	7	ST&C	Surface
Production -	7510	6.25	4.5	ST&C	4630

Casing Properties: (No Safety Factor Included)

Casing String	Size (in.)	Weight (lb/ft)	Grade	Burst (psi.)	Collapse (psi.)
Surface	9.625	32	H-40	2270	1400
Intermediate	7	20	K-55	3740	2270
Intermediate	7	23	N80	6340	3830
Production -	4.5	11.6	J-55	5350	4960

Mud Program

Apx. Interval (ft.)	Mud Type	Mud Weight
0 - SCP	Water/Spud	8.6-9.2
SCP - ICP	Water/LSND	8.6-9.2
ICP - ICP2	Gas/Air Mist	NA
ICP2 - TD	LSND	8.6 - 9.2

Recommended Mud Properties Prio Cementing:

PV	<20
YP	<10
Fluid Loss	<15

Cementing Program:

	Surface	Intermediate	Production
Excess %, Lead	100	75	40
Excess %, Tail	NA	0	40
BHST (est deg. F)	75	120	183
Special Instructions	1,6,7	1,6,8	2,4,6

1. Do not wash pumps and lines.
2. Wash pumps and lines.
3. Reverse out
4. Run Blend Test on Cement
5. Record Rate, Pressure, and Density on 3.5" disk
6. Confirm densitometer with pressurized mud scales
7. 1" cement to surface if cement is not circulated.
8. If cement is not circulated to surface, run temp. survey 10-12 hr. after landing plug.

Notes:

*Do not wash up on top of plug. Wash lines before displacing production cement job to minmize drillout.

Surface:

Preflush	20 bbl.	FreshWater	
Slurry 1	154 sx Class C Cement		195 cuft
TOC@Surface	+ 2% CaCl2 (accelerator)		
			0.4887 cuft/ft OH

Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	15.2	1.27	5.8

Casing Equipment:

9-5/8", 8R, ST&C
1 Guide Shoe
1 Top Wooden Plug
1 Autofill insert float valve
Centralizers, as needed

Cementing Program

1 Stop Ring
1 Thread Lock Compound

Intermediate:

	Fresh Water	20 bbl	fresh water	
	Lead	421	sx Class "G" Cement	1108 cuft
	Slurry 1		+ 3% D79 extender	
	TOC@Surface		+1/4 #/sk. Cellophane Flake	
			+ 5 lb/sk Gilsonite	
	Tail	59	sx 50/50 Class "G"/Poz	75 cuft
	Slurry 2		+ 2% gel (extender)	
	500 ft fill		+1/4 #/sk. Cellophane Flake	0.1503 cuft/ft OH
			+ 2% CaCl2 (accelerator)	0.1746 cuft/ft csg ann
			+ 5 lb/sk Gilsonite	

Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)
Slurry 1	11.4	2.63	15.8
Slurry 2	13.5	1.27	5.72

Casing Equipment:
7", 8R, ST&C
1 Float Shoe (autofill with minimal LCM in mud)
1 Float Collar (autofill with minimal LCM in mud)
1 Stop Ring
Centralizers as needed
1 Top Rubber Plug
1 Thread Lock Compound

Production:

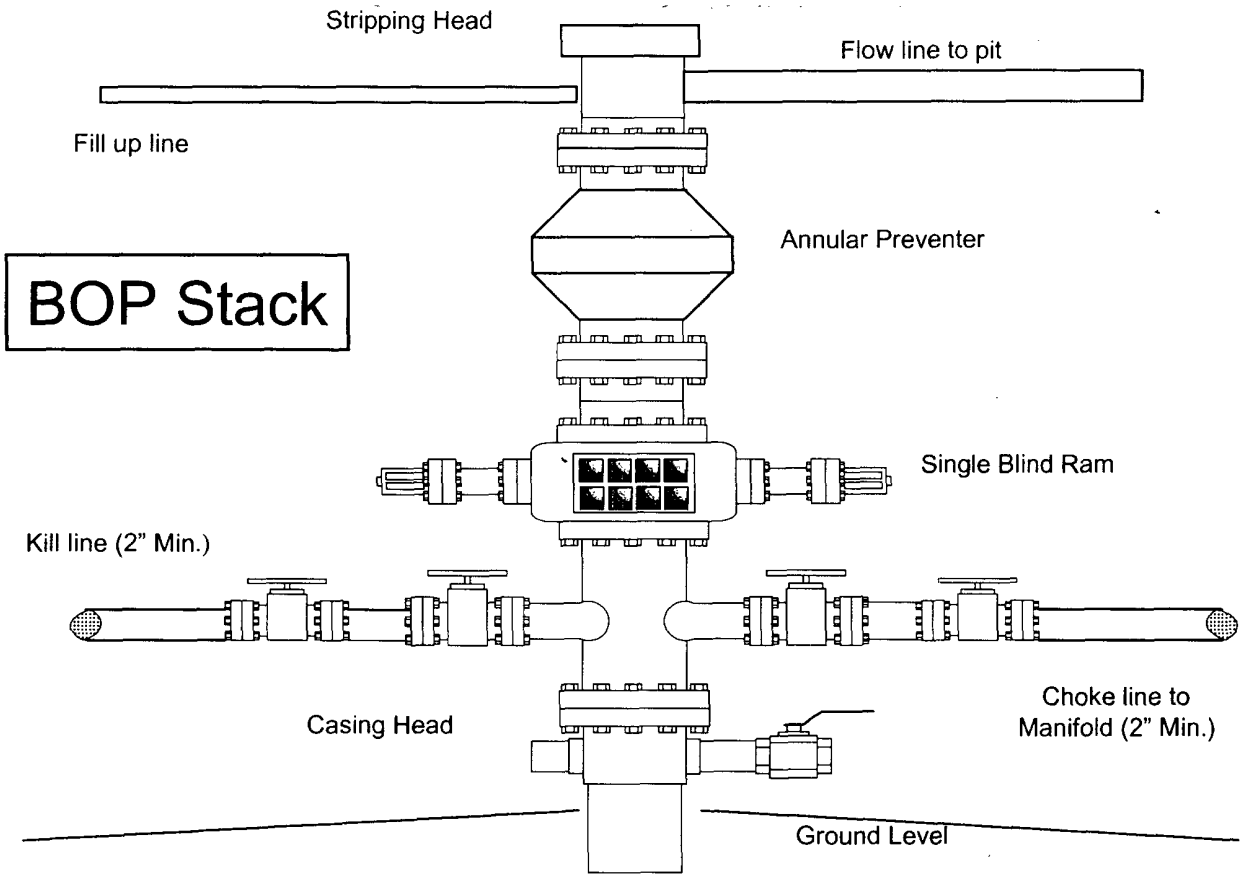
	Fresh Water	10 bbl	CW100	
	Lead	98	LiteCrete D961 / D124 / D154	248 cuft
	Slurry 1		+ 0.03 gps D47 antifoam	
	TOC, 400' above 7" shoe		+ 0.5% D112 fluid loss	
			+ 0.11% D65 TIC	
	Tail	145	sx 50/50 Class "G"/Poz	209 cuft
	Slurry 2		+ 5% D20 gel (extender)	
	1458 ft fill		+ 0.1% D46 antifoam	
			+ 1/4 #/sk. Cellophane Flake	
			+ 0.25% D167 Fluid Loss	
			+ 5 lb/sk Gilsonite	
			+0.1% d800, retarder	
			+0.15% D65, dispersant	
				0.1026 cuft/ft OH

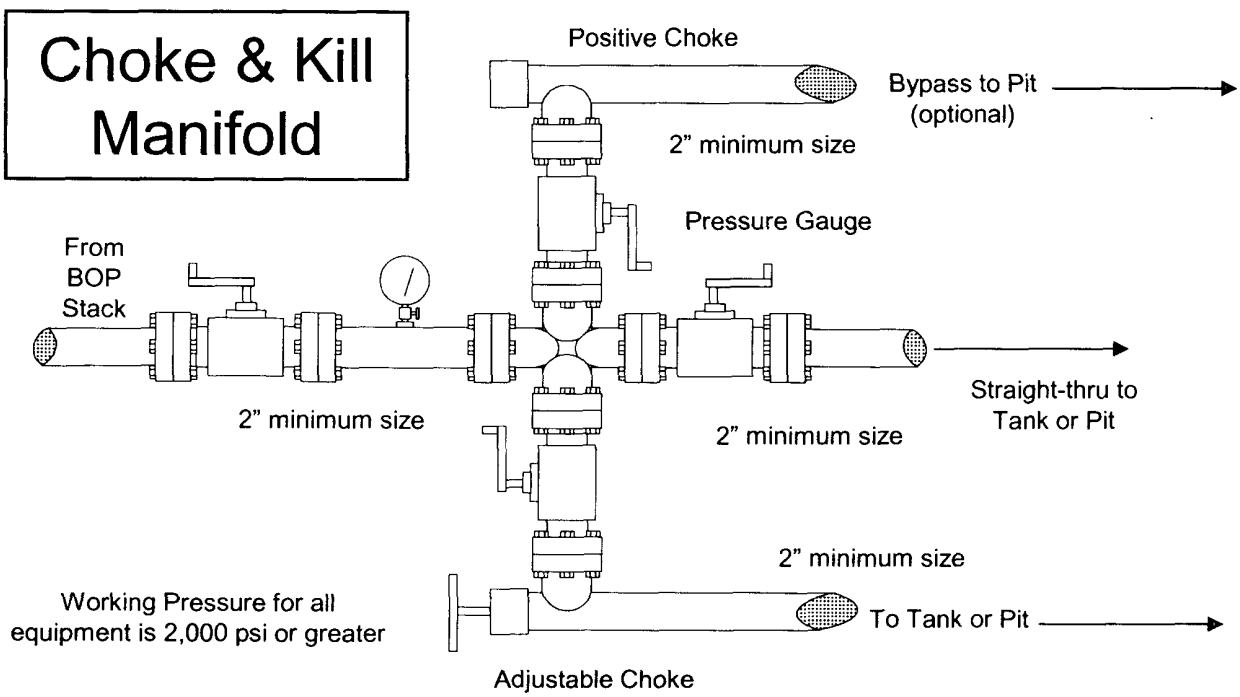
Slurry Properties:	Density (lb/gal)	Yield (ft3/sk)	Water (gal/sk)	0.1169 cuft/ft csg ann
Slurry 1	9.5	2.52	6.38	
Slurry 2	13	1.44	6.5	Top of Mancos 5552

Casing Equipment:
4-1/2", 8R, ST&C
1 Float Shoe (autofill with minimal LCM in mud)
1 Float Collar (autofill with minimal LCM in mud)
1 Stop Ring
Centralizers, as needed
1 Top Rubber Plug
1 Thread Lock Compound

BP American Production Company

Well Control Equipment Schematic





Additional Operator Remarks
Stewart LS 8M
APD

NOTICE OF STAKING WAS SUBMITTED ON 11/09/06

BP America Production Company respectfully requests permission to drill the subject well to a total depth of approximately 7510' MD. Complete in the Basin Dakota Pool, isolate the Dakota; complete into the Blanco Mesaverde, establish a production rate; drill out the bridge plug and commingle production downhole.

Application for Downhole Commingling authority (NMOCD order R-11363) will be submitted to all appropriate for approval after Permit to Drill has been approved.

If terrain allows it is our intent to pre-set the 9 5/8" casing on the above mentioned well by drilling a surface hole with air/air mist in lieu of drilling mud and the surface casing be cemented with 94.5 cu/ft type I-II, 20% FLYASH, 14.5 PPG, 7.41 gal/sk, 1.61 cf/sk Yield, 80 DEG BHST ready mix cement. If the area will not allow for pre-set the approved cement program will be followed.

SUPPLEMENTAL TO SURFACE USE PLAN

New Facilities:
A 4.5" diameter buried steel pipeline that is +/- 2000 feet in length will be constructed. The pipe wall thickness is .156 and the pipe wall strength is 42,000#. It will be adjacent to the access road and tie the well into an existing gas meter operated by BP America Production Company. The pipeline will not be used to transport gas to drill the well. After the well is spud the pipeline will be authorized by a right-of-way issued by El Paso Field Services.

APD/ROW